MYCOTAXON

Volume 111, pp. 495–499 *January–March 2010*

Entoloma festivum, a new species in subgenus *Trichopilus* from the Netherlands

Machiel E. Noordeloos

noordeloos@nhn.leidenuniv.nl
Netherlands Centre for Biodiversity Naturalis (section NHN)
P.O. Box 9514, 2300 RA Leiden, The Netherlands

Lucien C.A.F. Rommelaars

Beilerstroom 14, 5032 ER Tilburg
The Netherlands

Jac N.J. Gelderblom

Guido Gezellelaan 102, 4873 GG Etten-Leur
The Netherlands

Abstract — A full description is given of *Entoloma festivum*, a new species in subgenus *Trichopilus*, from the Netherlands. It is distinguished by its brown, radially striate pileus with squamulose centre and the polished stipe.

Key words — *Entolomataceae*

Introduction

The genus *Entoloma* is the second largest genus of *Agaricales* (after *Cortinarius*) and monophyletic (Co-David et al. 2009). Although it is fairly well known, in particular from Europe (Noordeloos 1992, 2004), new species are continuously discovered. During an investigation of the nature reserve de Leemputten (loam pits) in Dorst, prov. Noord-Brabant, a remarkable little *Entoloma* species has been discovered in a grassy-mossy, rather exposed, place. Its morphological characters are so different from the known species that it is described here as new. The specific epithet *festivum* not only means handsome, but is also sounds festive, commemorating the hundredth anniversary of the Dutch Mycological Society in 2008, when it was first made public.

Taxonomic description

Entoloma festivum Noordel., Rommelaars & Gelderblom**, spec. nov.**
MycoBank MB 515481 Figs. 1, Plate 1.

Habitus mycenoideus. Pileus 6–12 mm, acute conicus, hygrophanus, translucido-striatus, fuscobrunneus, fibrillosus, centro atrobrunneo, conspicue fibrilloso-furfuraceo; lamellae distantes, adnato-emarginatae, albae demum roseae brunneofimbriatae. Stipes 10–20 × 1–2 mm, fuscobrunneus, glaber, politus; sporae 8.5–10.5 × 5.5–7.5 µm, heterodiametricae, 5–8 angulatae; acies lamellarum sterilis; cheilocystidia versiformia, clavata vel lageniformia vel tibiiformia, cum pigmento intracellulari; pileipellis ex hyphis inflatis trichodermium formantibus, elementae terminalis clavatae, ad 20 µm latae pigmento intracellulari instructae; fibulae praesentes. In pratis, aestate.

Holotypus: L. Rommelaars, 17 VII 2004, Netherlands, Prov. Noord Brabant, Dorst Nature reserve (L).

Etymology: *festivum* (Lat.) = handsome.

Macrocharacters — Pileus 6–12 mm, convex to applanate with small, pointed umbo or slightly depressed at centre, with straight margin, hygrophanous, translucently striate almost to centre, warm reddish brown with almost black centre, radially fibrillose-scurfy, particularly at centre. Lamellae L = up to 20, l = 1–3, distant, adnate-emarginate with decurrent tooth, white then pink with entire, concolorous or brown edge. Stipe 10–20 × 1–2 mm, reddish brown, apex pruinose, downwards glabrous, polished. Smell and Taste not noted.

Microcharacters — Basidiospores 8.5–10.5 × 5.5–7.5 µm, Q = 1.3–1.6, heterodiametrical, 5–8 angled in side-view. Basidia 4-spored. Lamella edge sterile. Cheilocystidia 18–43 × 6–13 µm, clavate to lageniform or tibiiform, often with brown, intracellular pigment. Hymenophoral Trama regular, made up of medium-sized, cylindrical elements, 60–120 × 7–20 µm. Pileipellis a trichoderm of septate hyphae, 8–15 m wide, with clavate terminal elements, 12–30 × 8–20 µm with abundant, brown, intracellular pigment. Brilliant Granules absent. Clamp-Connections present.

Ecology and Distribution — In nutrient-poor, mossy grassland on sandy loamy soil. Only known from the type locality in the Netherlands

Comments — *Entoloma festivum* is an attractive little species with its brown, strongly striate pileus with dark, scurfy centre, brown lamellae, and polished stipe. The distinctly capitate (in part) cheilocystidia remind of those found in *Entoloma* subgenus *Trichopilus*, but most species in this group differ by having a non- or weakly hygrophanous, opaque, non-translucent pileus (Noordeloos 2004). *Entoloma brunneoflocculosum* Arnolds & Noordel. is a somewhat similar species with a non-striate pileus, smaller spores, and fertile lamellar edge. The extralimital species from Tasmania, *Entoloma sepiaceovelutinum* G.M. Gates & Noordel., superficially resembles our species but differs strikingly by the much larger spores and large lageniform cheilocystidia (Gates & Noordeloos 2007). *Entoloma corneum* E. Horak from New Zealand is smaller, has a translucently striate pileus, less distinctly angled spores, and clampless basidia (Horak 2008).

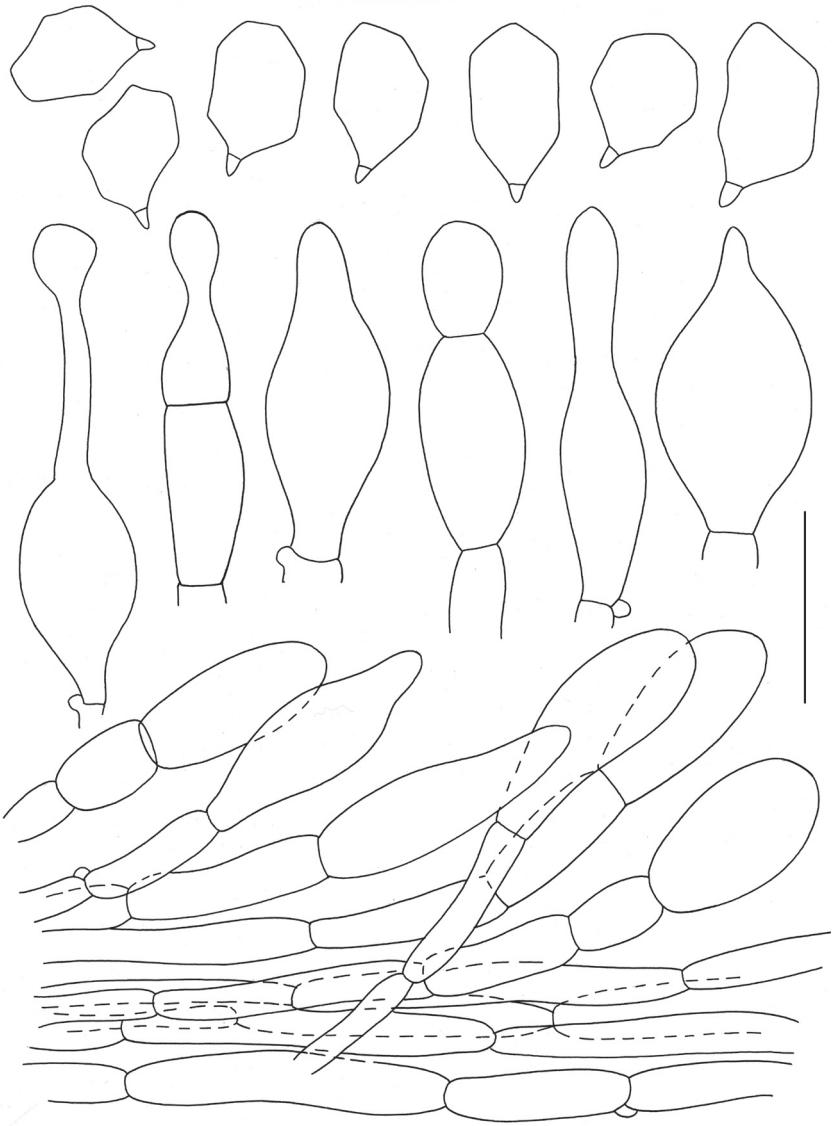

Fig. 1. *Entoloma festivum*. Spores, cheilocystidia, and pileipellis.
All figs from holotype. Bar = 10 μm.

Plate 1. *Entoloma festivum*. Basidiocarps in situ. (Photo Rommelaars)

Acknowledgments

Mrs. Anita Walsmit-Sachs and Mr. Ben Kieft are thanked for preparing the illustrations for print. Annemieke Verbeken and Guillaume Eyssartier are greatly thanked for critically reading a draft of the manuscript.

Literature cited

Co-David DLV, Langeveld D, Noordeloos ME. 2009. The molecular phylogeny and spore evolution of *Entolomataceae*. Persoonia 23: 147–176.

Gates GM, Noordeloos ME. 2007. Preliminary studies in the genus *Entoloma* in Tasmania – I. Persoonia 19: 157–226.

Horak E. 2008. *Agaricales* of New Zealand 1: *Pluteaceae* – *Entolomataceae*. The fungi of New Zealand, vol. 5. Fungal Diversity Research Series, vol. 19. Fungal Diversity Press, Hong Kong.

Noordeloos ME. 1992. *Entoloma* s.l. Fungi Europaei, vol. 5. Giovanna Biella, Italy.

Noordeloos ME. 2004. *Entoloma* s.l. Fungi Europaei, vol. 5a. Edizione Candusso, Italy.